

**WHAT IS CLAIMED IS:**

1. A raster scanning system for scanning photo-stimulable radiographic media, comprising:
  - (a) light emitting diode array adapted to fire a beam to form a stimulated area of radiographic media generating emitted light;
  - (b) collection optics adapted to collect emitted light and reflected light from the radiographic media;
  - (c) a filter to permit the emitted light to pass to a charge coupled detector (CCD);
  - (d) an analog to digital converter for receiving the signal from the charge coupled detector;
  - (e) a control processing unit (CPU) for receiving the converted signal; and
  - (f) an output device for processing the signal from the CPU.
2. The system of claim 1, wherein the area is a series of stimulated areas.
3. The system of claim 1, wherein the radiographic media is a phosphor sheet.
4. The system of claim 1, wherein the radiographic media is a sheet, a screen, a plate, or combinations thereof.
5. The system of claim 1, wherein the collection optics are a chamber comprising a reflective surface.
6. The system of claim 1, wherein the radiographic media moves along an axis perpendicular to the stimulated line.

7. The system of claim 5, wherein the reflective surface is a mirrored surface.

8. The system of claim 1, wherein the collection optics provide a reflectivity between 80 and 95%.

9. The system of claim 1, wherein the filter is blue.

10. The system of claim 1, wherein the collection optics has a collection efficiency of approximately 52%.

11. The system of claim 1, wherein the output device is a filmwriter, a printer or a display.

12. A raster scanning system for scanning photo-stimulable radiographic media, comprising:

- (a) light emitting diode array adapted to fire a beam to stimulate an area of radiographic media which generates emitted light, wherein said radiographic media has a first side and a second side;
- (b) a first collection optics to collect emitted light and reflected light from the radiographic media disposed on a first side of the radiographic media and a second collection optics to collect second emitted light disposed on a second side of the radiographic media;
- (c) a filter to permit the emitted light to pass to a first charge coupled detector (CCD);
- (d) a second charge coupled detector disposed on the second side to and in communication with the second collection optics;
- (e) an analog to digital converter for receiving the signals from the first and second CCDs;
- (f) a control processing unit for receiving and compiling the signal from the analog to digital converter; and

(g) an output device for processing the signal from the control process unit.

13. The system of claim 12, wherein the area is a series of stimulated areas.

14. The system of claim 12, wherein the radiographic media is a phosphor sheet.

15. The system of claim 12, wherein the radiographic media is a sheet, a screen, a plate, or combinations thereof.

16. The system of claim 12, wherein the first and second collection optics are each a chamber comprising a reflective surface.

17. The system of claim 12, wherein the radiographic media moves along an axis perpendicular to the stimulated line.

18. The system of claim 16, wherein the reflective surface is a mirrored surface.

19. The system of claim 12, wherein the collection optics provide a reflectivity between 80 and 95%.

20. The system of claim 16, wherein the filter is blue.

21. The system of claim 16, wherein the collection optics has a collection efficiency of approximately 52%.

22. The system of claim 1, further comprising a second light emitting diode array and second filter disposed on the second side of the radiographic media to stimulate a second area for emitting light.